P.O. Box 57428 Murray UT 84157-0428 Thursday, 5<sup>th</sup> October 2006

National Organic Standards Board c/o Ms. Valerie Frances Room 4008 – S. Bldg. 1400 & Independence Avenue SW Washington DC 20250-0001

Re: Livestock Committee

NOSB-Aquatic Animal Task Force Revised – Interim Final Report

Dear Ms. Frances,

I am pleased to provide additional comments to the most recent deliberations on organic standards for aquatic animals.

## 1. Fish meal and fish oil.

As a co-editor of the NOAWG whitepaper, submitted to NOP and NOSB several months ago, and used as a reference document by the NOSB-AATF, I wanted to point out that references were made in that document specific to international organic certifications on use of fish meal and fish oil in organic aquaculture feeds. Many of these certification agencies are accredited with USDA organic program(s): Naturland, British Soil Association, KRAV, etc.)

I do not understand why the NOSB nor these international certifiers have <u>not</u> undertaken mutual, direct exchanges to talk openly about the rationale and guidelines for use of noncertified organic fish meal and fish oil in existing organic aquaculture in Europe. Y'all are organic peers.

It seems to me that these international entities value participation in the U S marketplace sufficiently to want to make it's case to the NOSB as to the legitimized use of fish meal and oil as essential for fish health, growth and a desired nutritional profile in the finished products. At the same time, I hope the USA organic program isn't parochial to the extent that it doesn't care to listen to it's peers in other parts of the globe; and I mean that with all due respect.

## 2. Alternative nutrients to replace fish meal and oil.

The current trend of recommendations may be painting the aquatic animal program into a corner. There appears to be support within NOSB for <u>proscribing</u> use of animal byproduct proteins in aquaculture feeds, even though these nutrients may be sourced from rendered,

certified organic animals. These protein sources provide important nutrients that could balance the diet where severe limits are placed on use of fish meal. Lysine, for example, is plentiful in certain animal byproducts.

Let's presume we have a condition of no fish meal or limited use of fish meal, and no use of animal byproduct proteins, or synthetic amino acids. What does that leave as a source of nutrition? Remember, too, that fish are biologically designed for protein and fat

metabolization. Carbohydrates are way down on the list, and in many instances are antinutritional, creating pathologies harmful to fish health.

The remaining source is vegetable protein, particularly concentrated protein such as soy isolate, soy protein concentrate, vital wheat gluten, wheat protein concentrate, corn gluten meal, flax meal, soyabean meal and canola meal. Lower protein products such as wheat flour only serve as a structure for physically creating a fish feed via gelatinization of the starch component.

Then, let's consider sources of essential lipids or fatty acids. Most vegetable oils are high in omega-6 fatty acids and can only partially meet dietary needs of fish: soybean oil and canola oil. Flaxseed oil and perhaps some algae concentrates may provide essential omega-3 fatty acids DHA and EPA.

All in all, the remaining "space" left for aquatic animal nutrition ends up in a tight little corner of vegetable and algae proteins and lipids. Thus far, I'm not aware that one can organically source most of the protein concentrates.

I am reminded of a comment made by a former ass't deputy director of the NOP who said to me, "but why would we feed soybeans to a fish?" Personally, I distill nutrient issues down to amino acids, fatty acids, and other essential dietary components that animals metabolize for various needs.

"Why is it any more appropriate to use fish meal as a source of nitrogen in soil?", one might speculate. Nonetheless, it's a valuable source of nitrogen. Soybean is fine with me as long as it does it's job. And there's the glitch: sometimes it does, but often times it doesn't. Soybean meal, for example, is anti-nutritional in production of atlantic salmon, and it's because of certain fractions of the carbohydrate-complex in the meal. I don't want to harm salmon just to accommodate a tendency for the organic community to favor vegetable

sources of nutrition in animal agriculture. That's one justification I use for utilization of certified organic animal byproduct proteins (again, essential amino acids) in animal agriculture.

## 3. Research.

If the NOSB eventually proposes severe limits on use of fish meal and oil, including a possible 7-year sunset clause, it's going to require some serious commitment from USDA-CSREES-Organic Transitions funding to come up with solutions. Otherwise, the status of aquatic animals in the organic program is going to be compromised by the end of that period.

Providing realistic nutrition for aquatic animal production is the quintessential hurdle. You need to accept and navigate through the challenge that fish are not cows, not pigs, not lamb or chickens, and not terrestrial agriculture. Fish need amino acids, fatty acids, vitamins, minerals and very, very little from the sugar group.

## 4. In the absence of a viable aquatic animal program....what are we left with?

Presently, almost all organically farmed fish comes from international sources, and international production is diversifying and growing. The USA is a valuable marketplace for these products. Organic products are marketed in all states, except California, under the lower-case "o" organic, i.e. organic but absent of the familiar USDA labeling. This is likely to be the condition, indefinately, within the marketplace if-and-until USDA-NOP makes a decision. Therefore, domestic production is stymied and really not a "player" in the U S marketplace. That's a shame and I don't see it changing.

I hope that this information will spur the NOSB into seeking additional advice from organic professionals who have already established aquatic animal standards in other parts of the world. The USA should not be an island unto itself.

Respectfully,

Richard C. Nelson, VP Purchasing and General Administration Nelson & Sons, Inc.

(submitted via electronic email attachment)